Setting up of a gas turbine project by the DESU

891. SHRI PARVATHANENI UPENDRA: Will the Minister of ENERGY be pleased to state:

(a) whether there is any proposal for setting up of a Gas Turbine Project by the Delhi Electric Supply Undertaking; and

(b) if so, what is the total estimated cost of the project, its power generating capacity and the progress made in the implementation of the project?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI): (a) and (b) A Gas Turbine Project of 180 MW (6x30 MW) has already been commissioned by the Delhi Electric Supply Undertaking during 1986-87. The estimated cost of the Project is Rs. 87 crores.

Use of solar energy

892. SHRI S. S. AHLUWTLIA: Will the Minister of ENERGY be pleased to state:

(a) the steps taken for the use of solar energy;

(b) how much amount is earmarked for the Seventh Plan period for this purpose;

(c) whether States like Bihar where there is a shortage of hydro-electric power will be benefited by any provision for the use of solar energy; and

(d) if so, what are the details in this regard and if not, what are the reasons therefor?

THE MINISTER OF ENERGY AND MINISTER OF STEEL AND MINES (SHRI VASANT SATHE) : (a) As a result of intensive R&D activities taken up in the various areas of solar energy a number of technologies have been developed and their technical feasibility for various applications including generation of electricity has been established. Regarding solar thermal applications an extension programme has been launched throughout the country These have aready started providing and saving energy in a significant way. Solar photovoltaic systems have been developed and are being increasingly deployed for electrifying remote villages and other small power needs.

(b) An amfount of Rs. 32 crores for solar thermal and Rs. 27 crores for solar photovoltaic programmes has been earmarked out of the total allocation of Rs. 412.35 crores during the Seventh Plan period.

(c) and (d) Use of solar energy will benefit the country including th State of Bihar. The Department of Nonconvetional Energy Sources is implementing the programme of solar energy applications through the State Government Bihar Renewable Energy Development Agency and Rural Electrification Corporation. Under the solar thermal extension programme of the Department, 8 solar water heating systems, are being installed and so far 44 solar photovoltaic water pumping systems and 60 photovoltaic streetlighting systems have been supplied to the State for pumping water and lighting applications, respectively, in the rural areas.

Requirement of electricity in Bihar

893. SHRI S. S AHLUWALIA : Will the Minister of ENERGY be pleased to state:

(a) what is the present consumption and requirement of electricity in units in the State of Bihar;

(b) what was the total electricity generated in Bihar in 1985-86 and 1986-87; and

(c) what is the quantum of electricity which the Central Government propose to supply to the rural areas of Bihar for irrigation purposes during the current financial year?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI): (a) The energy requirement in Bihar during March, 1987 was 454 Million Units against which the availability was 340 Million Units.

(b) The total energy generated in Bihar during 1985-86 and 1986-87 was 3324 Million Units and 3680 Million Units respectively.

(c) The suppy of electricity to various sectors is the responsibility of the State authorities and the supply is regulated depending upon availability of power. It is, therfore not possible to indicate the exact quantum of power which will be supplied to rural areas in Bihar for irrigation. States have been advised to give priority for supply of power to agricultural sector.

Saal hydro-electric project

894. PROF. C. LAKSHMANNA : Will the Minister of ENERGY be pleased to state:

(a) what were the targeted dates for commissioning and competition of Salal hydro-electric project:

(b) the reasons for the deay, if any, in commissioning of this important project; and

(c) what are the new targeted dates for commissioning and completion of this project?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI) : (a) to (c) The units of the Salal hydro-electric project (3 x 115 MW) which were earlier expected to be commissioned in March 1987 are now sheduled to be commissioned by June-July, 1987. The commissioning programme has been affected, *inter alia*, by the presence of major shear zones surcharged with water in the tailrace tunnel and the availability of Chenab waters for initial filling of the Salal reservoir.

Indo-USSR cooperation in the power sector

895. SHRI MUKHTIAR SINGH MALIK : Will the Minister of ENERGY be pleased to state:

(a) whether it is a fact that India and the USSR have recently signed a protocol for co-operation in the power sector;

(b) if so, what are the broad outlines of the said protocol;

(c) the areas which are likely to be served by it; and

(d) what is the amount of foreign exchange earmarked for the purpose?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI) : (a) Yes, Sir.

(b) to (d) The Protocol mainly covers the implementation of the Vindhyachal and Kahalgaon Super Thermal Power Stations, the Vindhyachal-Jabalpur- Itarsi 400 KV Transmission Line and the Tehri Hydro Complex with Soviet assistance. The Soviet credit in foreign exchange is of the order of 1300-1355 million Roubles (provisional). The possibilities of further cooperation between the two countries in the Power Sector are also referred to in the Protocol.